

Application No.: 09/617,049
Art Unit 2182

Attorney Docket No. 2950-0164P
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REMARKS

Applicants thank the Examiner for the very thorough consideration given the present application.

Claims 1-26 are now present in this application. Claims 1, 5, 9, 15, 19, 21, 23 and 25 are independent.

Reconsideration of this application is respectfully requested.

Drawings

Applicants have not received a Notice of Draftsperson's Patent Drawing Review PTO-948 or other indication of whether or not the formal drawings have been approved by the Draftsperson. Since no objection has been received, Applicants assume that the drawings are acceptable and that no further action is necessary. Confirmation thereof in the next Office Action is respectfully requested.

Rejections under 35 U.S.C. §103

Claims 1-3, 5-6, and 9-26

Claims 1-3, 5-6, and 9-26 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Yasui in view of Kurihara. This rejection is respectfully traversed.

A complete discussion of the Examiner's rejection is set forth in the Office Action, and is not being repeated here.

Yasui discloses an audio interface 12, which includes an A/D comparator and a D/A comparator (see Fig. 3 of Yasui). Audio interface 12 receives analog audio input data from a source external to the audio receiving apparatus, digitizes the input analog audio data, and then supplies the digital audio data to an audio encoder/decoder 14 (see Yasui, Col.3, lines 33-36 and Fig. 3).

As a general definition, ATAPI (AT Attachment Packet Interface) is an interface between a personal computer (PC) and attached CD-ROM drives and tape backup drives. Most of today's PC computers use the standard Integrated Drive Electronics (IDE) interface to address hard disk drives. ATAPI provides the additional commands needed for controlling a CD-ROM player or tape backup so that a PC can use the IDE interface and controllers to control these relatively newer device types.

The Applicants have provided that using ATAPI protocol, a device connected to a bus must conduct a preparation process before it transfers data through the bus. After the preparation process is completed two devices connected to the bus can transfer data therebetween. This is a slow and time-consuming process.

When a PC is connected to a CD-ROM player, the PC specifies this preparation process, and conventionally, the process must be performed before

data transfer can take place. A great deal of time can be saved if the lengthy process could be avoided even though an *ATA command* has been issued (see Fig. 1), and the lengthy preparation process is *called for* (specified).

The Applicants' claimed invention provides for a bypass of the preparation process and transfer of record-formatted data, even though the preparation process is called for. The Examiner has admitted that Yasui does not request the preparation process. The Examiner relies of Kurihara to supply the deficiency of Yasui with regard to the preparation process. However, this deficiency is primarily related to the Examiner's rejections of dependent claims.

Particularly, the Examiner refers to Col.10, lines 6-9, which provides that CD-ROM unit 14 is connected to the parallel/PCI drive 125 via a parallel communication line such as ATAPI (AT Attachment Packet Interface). The Applicants submit that this portion describes a type of line used, but does not demand that a lengthy preparation process be performed before data transfer can take place.

The lengthy conventional preparation process is described in Fig. 1, as provided by the Applicants, and the process includes *sending/receiving packet commands through the bus when a record command is received* (see Fig. 1 and Applicants' claim 5). The Applicants' claimed invention provides for a bypass of this portion of the preparation process (even though it is requested) before transfer of data can begin. In examining the references provided by the

Examiner, they all have the deficiency of specifying the lengthy preparation process described in Fig. 1. Further, a similar preparation process is not specified.

Therefore Kurihara, like Yasui, fails to teach or suggest a combination of elements in an audio data receiving apparatus, including transferring, via a bus, the record-formatted audio data to a disk recording/reproducing device without conducting a preparation process for transferring data when a record request is received from the disk recording/reproducing device, wherein the preparation process is specified in a bus standard protocol for a personal computer, as recited in independent claim 1, and similarly stated in independent claims 9 and 15.

Further, Kurihara, like Yasui, fails to teach or suggest a combination of elements in an audio data recording apparatus, including a connector sending/receiving signals through a bus in accordance with a bus protocol compatible with a bus protocol specified for use in a personal computer; and a controller controlling the connector to transmit a transfer start signal to a counter part of the bus without sending/receiving packet commands through the bus when a record command is received, as recited in independent claim 5.

With regard to independent claims 19, 21, 23 and 25, the methods and apparatuses disclosed therein are just as clever and effective at saving time as those described above. In this group of claims, an ATAPI protocol bus is

specified as the bus to be used, and a first start signal signaling to start data transfer is sent. The conversion start signal (a second signal) however, signals to convert data into a format for transfer over the bus, *through a connector other than the bus*. Therefore, according to the use of these two signals, data is nevertheless, received through the bus. The methods and apparatuses recited in these claims also effectively bypasses the lengthy preparation processes, and therefore time is saved.

These features are neither disclosed, nor suggested by the prior art of record. Particularly, neither Kurihara, nor Yasui discloses or suggests the following combinations:

a method of interfacing digital audio data for a rewritable optical disk driver, including:

first sending a start signal, signaling to start a data transfer operation, through an AT attachment packet interface (ATAPI) protocol bus;

second sending a conversion start signal, signaling to convert data into a format for transfer over the bus, through a connection other than the bus; and

receiving data through the bus in accordance with the start signal and the conversion start signal,

as recited in independent claim 19,

an apparatus to interface digital audio data for a rewritable optical disk driver, including:

a sending interface sending a start signal, signaling to start a data transfer operation, through an AT attachment packet interface (ATAPI) protocol bus;

a controller sending a conversion start signal, signaling to convert data into a format for transfer over the bus, through a connection other than the bus; and

the sending interface receiving data via the bus in accordance with the start signal and the conversion start signal,

as recited in independent claim 21,

a method of interfacing digital audio data for a rewritable optical disk driver, including:

first receiving a start signal, signaling to start a data transfer operation, through an AT attachment packet interface (ATAPI) protocol bus;

second receiving a conversion start signal, signaling to convert data into a format for transfer over the bus, through a connection other than the bus; and

transferring data through the bus in accordance with the start signal and the conversion start signal,

as recited in independent claim 23,

an apparatus to interface digital audio data for a rewritable optical disk driver, including:

a format converter receiving a conversion start signal, signaling to convert data into a format for transfer over the bus, through a connection other than the bus;

a transfer interface receiving a start signal, signaling to start a data transfer operation, through an AT attachment packet interface (ATAPI) protocol bus; and

transferring data received from the format converter through the bus in accordance with the start signal and the conversion start signal,

as recited in independent claim 25. Reconsideration and withdrawal of this art grounds of rejection is respectfully requested.

Claims 2, 3, 6, 10-14, 16-18, 20, 22 and 24 depend, either directly or indirectly, from independent claims 1, 5, 9, 15, 19, 21, 23 and 25, which are allowable for the reasons set forth above, and therefore claims 2, 3, 6, 10-14, 16-18, 20, 22 and 24 are allowable based on their dependence from claims 1, 5, 9,

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15, 19, 21, 23 and 25. Reconsideration and allowance thereof are respectfully requested.

Claims 4, 7 and 8

Claims 4 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Yasui and Kurihara as applied to claim 1, above and further in view of Fujita et al. (Fujita), and claims 7 and 8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Yasui and Kurihara, as applied to claim 5, above, and further in view of Scheffler. These rejections are respectfully traversed.

Yasui and Kurihara (argued above) fail to disclose or suggest the features of independent claims 1 and 5. Neither Fujita, nor Scheffler can supply the deficiencies. Claims 4, 7 and 8 depend, either directly or indirectly on independent claims 1 and 5, which are allowable for the reasons set forth above, and therefore claims 4, 7 and 8 are allowable based on their dependence from claims 1 and 5. Reconsideration and allowance thereof are respectfully requested.

Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that

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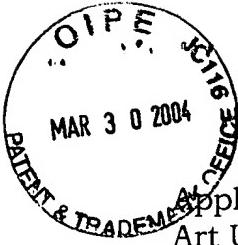
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the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone Percy L. Square, Registration No. 51,084, at (703) 205-8034, in the Washington, D.C. area.

Prompt and favorable consideration of this Amendment is respectfully requested.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicant(s) respectfully petition(s) for a three (3) month extension of time for filing a reply in connection with the present application, and the required fee of \$950.00 is attached hereto.



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If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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